

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problems Mailbox.**

THIS PAGE BLANK (USPTO)

(12) UK Patent Application (19) GB (11) 2 161 008 A

(43) Application published 2 Jan 1986

(21) Application No 8416591

(22) Date of filing 29 Jun 1984

(71) Applicant
Maygay Machines Limited (United Kingdom),
Primrose Avenue, Fordhouses, Wolverhampton
WV10 8AW, West Midlands

(72) Inventor
Donald Samuel Towson

(74) Agent and/or Address for Service
Forrester Ketley & Co,
Rutland House, 148 Edmund Street, Birmingham
B3 2LD

(51) INT CL⁴
G07F 17/34

(52) Domestic classification
G4V 118 AA
U1S 1174 G4V

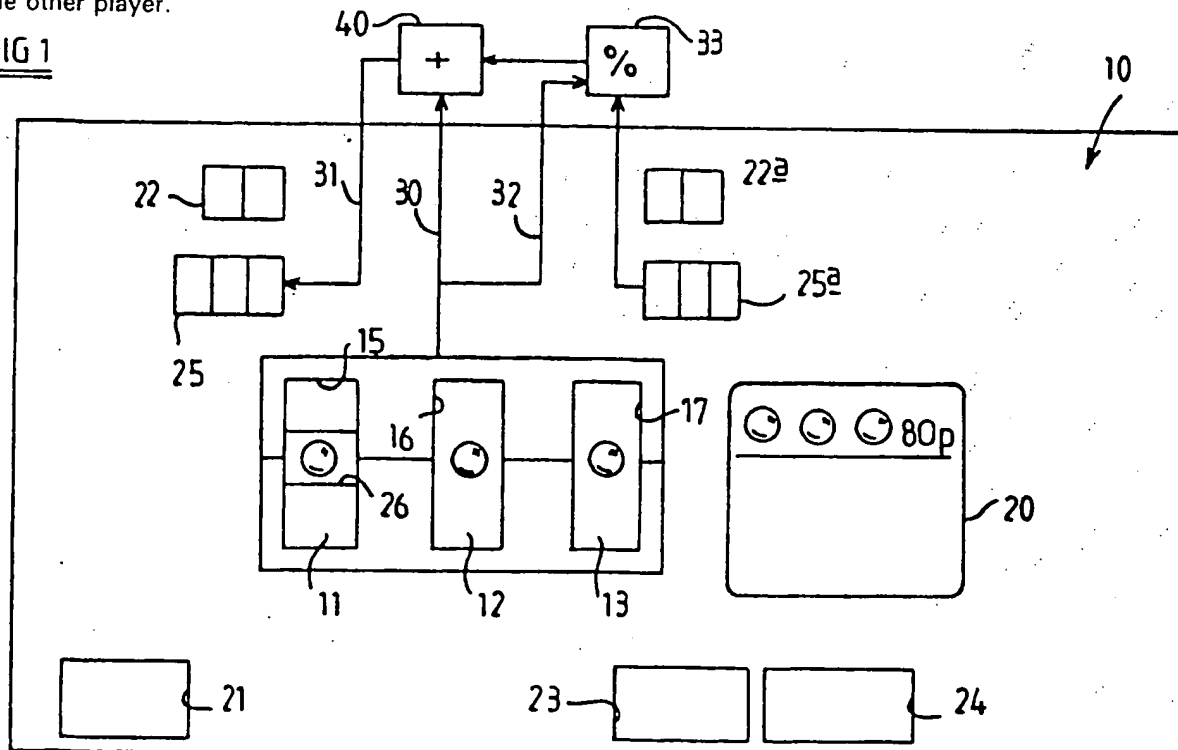
(56) Documents cited
GB A 2149174 GB A 2148037

(58) Field of search
G4V

(54) Gaming machine

(57) A gaming machine of the kind commonly known as a fruit machine, which at the end of a play initiated by operation of a starting means (21) by a player, a random combination of symbols, one from each of two or more groups of different symbols is indicated (11,12,13), winnings being credited and/or paid out to the player in the event of the indicated combination of symbols being any one of a number of predetermined winning combinations, the machine (10) being adjusted for play by at least two players who can play and compete against one another, in addition to each competing against the machine (10), the machine crediting each player's winnings for a predetermined number of plays, and displaying for each player the total winnings for a predetermined number of previous plays, the machine having means to enable all or a proportion of the winnings credited to one player from a previous game, or previous games, to be subtracted from said one player's winnings and credited to the other player.

FIG 1



GB 2 161 008 A

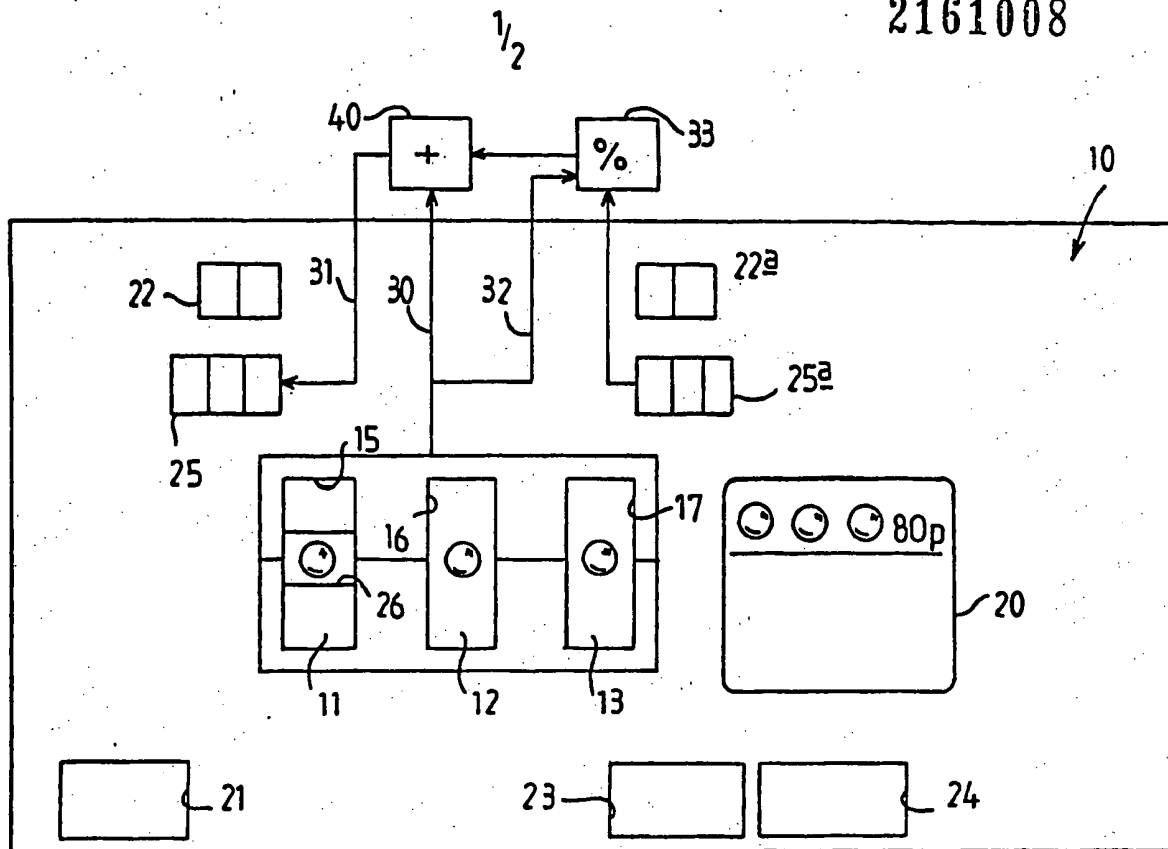


FIG 1

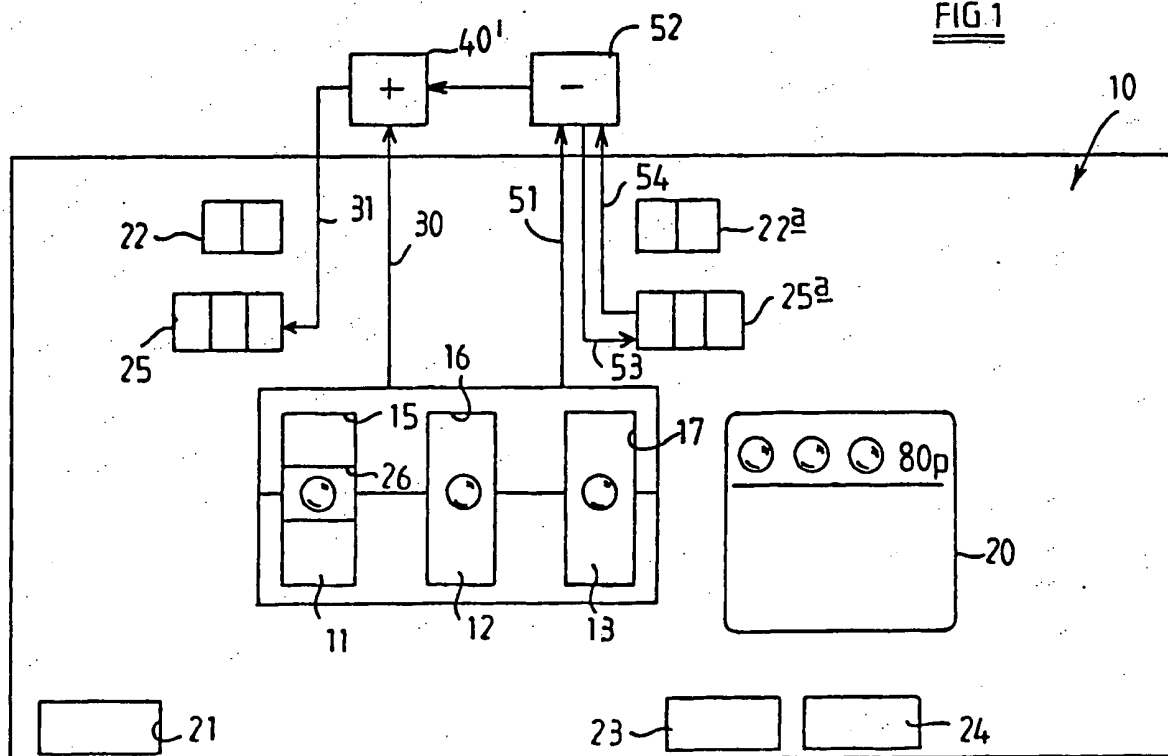
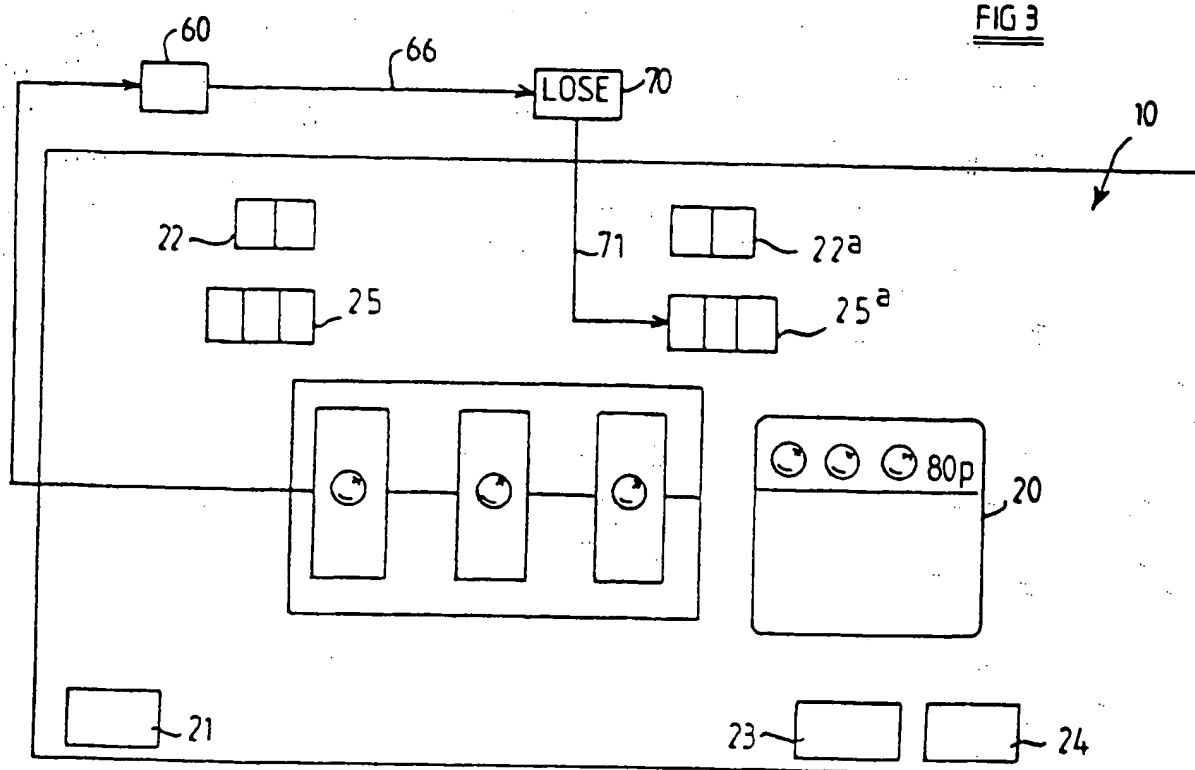
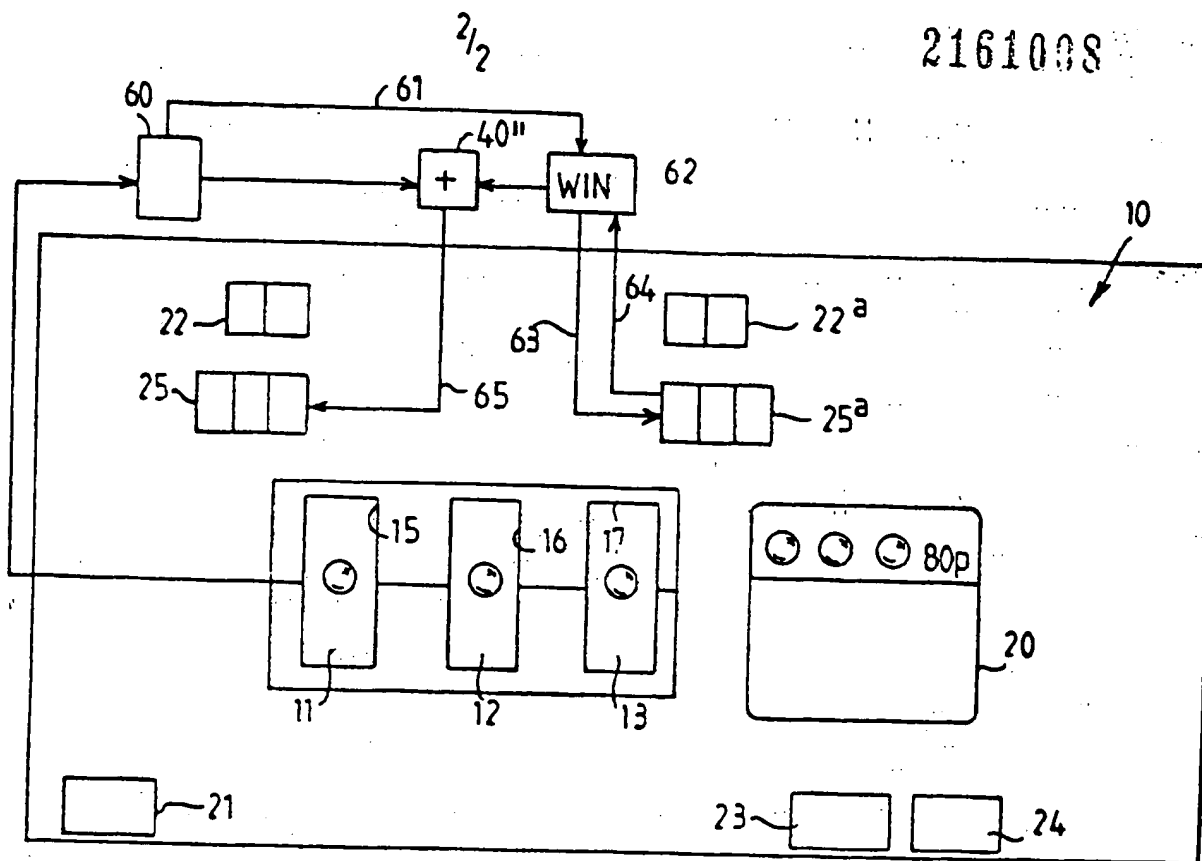


FIG 2



SPECIFICATION

Gaming machine

5 This invention relates to a gaming machine of the kind commonly known as a fruit machine, which at the end of a play initiated by operation of a starting means by a player, a random combination of symbols, one from each of two or more groups of different symbols is indicated, winnings being credited and/or paid out to the player in the event of the indicated combination of symbols being any one of a number of predetermined winning combinations, the starting means being either coin operated so that a play is started on the insertion of a correct denomination coin or coins (which term includes money tokens) or the machine may have a coin-free means adapted on insertion of a correct denomination coin or coins to render the starting means operative, a play then being started when the player operates a push button or handle.

More particularly, the invention relates to a gaming machine which at least two players can play and compete against one another, in addition to each competing against the machine. To achieve this, the machine credits each player's winnings for a predetermined number of plays, which may be one play each, or more than one play each, and the machine displays for each player the total winnings for a predetermined number of previous plays. Thus, the player who has the most winnings credited at the end of the predetermined number of plays will have won, although each player may collect his winnings as displayed or share the total winnings out as agreed. Such a gaming machine will hereinafter be referred to as being "of the kind specified".

It will be appreciated that the machine may display the actual winnings in figures, e.g. 30p, or may give another indication of the player's winnings, such as displaying points equivalent to the monetary winnings, or any other type of display.

The invention has been devised primarily but not exclusively in connection with a gaming machine of the kind specified in which two or more groups of symbols are carried by the peripheries of a corresponding number of rotary drums or reels, the drums or reels being rotated on operation of the starting means and being arrested in random positions at the end of the game, so that a random combination of symbols is displayed through a window or windows in the housing of the machine.

However, the invention is also applicable to a gaming machine of the kind specified in which the symbols are projected onto a screen, or to a machine wherein the groups of symbols are displayed by a display panel and during a game, lamps disposed behind the

respective symbols of each group are illuminated in sequence, a random combination of symbols remaining illuminated at the end of the game.

70 The object of the present invention is to provide a gaming machine of the kind specified in which the competitiveness between two player is enhanced.

According to the invention, we provide a gaming machine of the kind specified having means to enable all or a proportion of the winnings credited to one player from a previous game, or previous games, to be subtracted from said one player's winnings and credited to the other player.

80 If desired, the machine may pay out winnings to the players after each winning play in addition to displaying each of their winnings, in which case the competitiveness between the players would only be for amusement, although preferably the players may only collect their winnings as displayed at the end of a predetermined number of plays, i.e. a game so that each player may actually lose a proportion, or all of his winnings, to the other player.

In one embodiment, one player may elect to gamble his winnings against the other player when said one player has a winning combination of symbols and a gamble feature operates. The gamble feature may be operated at random by the machine or upon a predetermined winning combination of symbols being displayed.

100 Thus in the event of said one player winning his gamble, a proportion of any already credited winnings of the other player would be deducted and credited to said one player, but in the event of said one player losing, his winnings from that play would be credited to the other player.

In an alternative embodiment, upon the appearance of a special symbol present on some of the symbols in any winning combination of symbols in a game played by one player, the machine may be arranged to automatically deduct at least a proportion of any already credited winnings of the second player and credit them to said one player instead of or in addition to the winnings from the winning game. For example, a percentage of the win of the winning play may be deducted from the other player's winnings, or a percentage of the other player's already credited winnings. Where more than one special symbol is provided, for example one symbol on each group of symbols, the appearance of two such symbols in a winning combination of symbols in a play by the first player may be arranged to subtract a different proportion, e.g. all, of the winnings of the other player and credit them to said one player.

The machine may be provided with a nudge and/or hold after win feature to further increase the chances of each of the players

obtaining a winning combination.

The invention will now be described with reference to the accompanying drawings, wherein:-

5 *Figure 1* is a diagrammatic view of a first embodiment of a gaming machine in accordance with the invention;

Figure 2 is a diagrammatic view of a second embodiment of a gaming machine in accordance with the invention; and

10 *Figures 3 and 4* are diagrammatic views of another machine embodying the invention, operating in alternate modes.

Referring to Fig. 1, a gaming machine 10 has three reels 11, 12 and 13, on the peripheries of which are marked a series of symbols, in the present case symbols depicting fruit such as berries, oranges etc., although any other symbols could be provided.

20 Upon operation of a start mechanism, the reels 11, 12 and 13 spin so as to bring different portions of their peripheries and hence different symbols into view through a window 15, 16, 17 respectively, and a stop mechanism stops the reels at random so that

25 one symbol from each reel 11, 12, 13 is displayed through its respective window. Upon predetermined combinations of symbols being displayed, (hereinafter called "winning combinations"), the machine 10 will pay out winnings, (hereinafter called "fruit win-

30 nings"), to a player, the amount of which will depend on the exact winning combination of symbols attained. Such machines are commonly known as fruit machines, and the drawings are only intended to diagrammatically represent a typical layout of machine, it being apparent to those skilled in the art that many variations of

40 layout are possible. Further, although rotatable reels 11, 12, 13 have been described, any other means of bringing different combinations of symbols into view could be used. For example, symbols could be projected onto a screen from an electronic rather than mechanical arrangement. Further, more than three reels or groups of symbols may be used if required, or only two.

50 In the machine described, a panel 20 is provided to indicate all the possible winning combinations of symbols (although only one is shown), and the amount of the fruit winnings which will be paid out if a particular combination is obtained.

55 The machine 10 is coin-freed, that is to say that upon insertion of a correct denomination coin or coins (which term includes money tokens) the start mechanism is operable by means of a start button 21 and the number of plays of the machine for which coins have been inserted, i.e. the number of plays bought, are credited on a display 22. After each play, the number of plays credited for

65 the value of coins originally inserted will be

reduced, and hence the number of plays indicated by display 22 will be reduced. Of course, the exact monetary value of coins credited could alternatively be displayed

70 which would decrease after each play. Alternatively, the machine could be coin operated, that is to say the start mechanism would operate automatically upon insertion of a correct denomination coin or sufficient coins. Such mechanisms are well known to those skilled in the art and hence further description is not considered necessary.

The machine 10 shown is a two player machine. Thus, either before or upon insertion of the coin or coins, it is necessary to select either one player or two player operation. Two buttons 23, 24 are provided for this purpose, button 23 selecting one player mode, and button 24 selecting two player mode. The operation of the machine 10 will be described hereinafter in relation to two player operation, although it will be appreciated that the machine may be played by one player if required, competing against himself.

80 Thus a second credit display 22a is provided on the right hand side of the figure, for the second player so that where two player operation is selected, half the plays bought will be credited to player one in display 22 on the left hand side of the figure, and half to player two as indicated in display 22a on the right hand side of the figure.

Each player also has a winnings indicator 25 and 25a respectively, to indicate the amount of winnings obtained by the player during a game, i.e. over a predetermined number of plays.

100 The players play alternately and upon each play, the number of plays indicated in display 22 or 22a is reduced by one.

105 Certain symbols on each reel 11 to 13 have an additional special marking, such as shown at 26 on reel 11. Thus during play, upon a winning combination being obtained, the combination may or may not include a symbol with such a special marking 26. Upon a winning combination being obtained and such a special marking occurring in the combination on any of the three reels, the machine operates as follows.

115 In Fig. 1, it is assumed that player one, i.e. the left hand player, has just obtained a winning combination of symbols, for example three oranges for which the fruit win is 80p as indicated on panel 20. The fruit winnings are credited to player one by a sensing mechanism of the machine 10 sending a signal to player one's indicator 25 along a line 30, through an adder 40 which is described in more detail hereinafter, and a further line 31 as shown. However, a signal is also sent along a line 32 to a calculating means 33 which calculates a fixed percentage of the fruit winnings, for example 50%, i.e. 40p. This amount is then subtracted from

player two's winnings, i.e., the right hand player, as indicated in his winnings indicator 25a. Player one's fruit winnings (80p) and the amount subtracted from player two's winnings (40p) are then added together in adder 40 and the total (£1.20) is credited to player one.

Upon subsequent plays, player two has a chance of recovering all or a proportion of his winnings which have been credited to player one if a special marking 26 occurs in a winning combination obtained by player two, or indeed player two may obtain some or all of player one's winnings depending on the value of the fruit winnings attained.

If desired, if two or three special markings 26 appear in a winning combination, the calculating means 33 may be arranged to subtract 100% of player two's winnings, or another different percentage, or even all of player two's winnings and credit them to player one.

If insufficient winnings are indicated in indicator 25 or 25a for the correct percentage of the fruit winnings to be subtracted therefrom, all of the available winnings may be subtracted and/or if required the machine may have a memory to memorise what is owed by one player to the other, and automatically subtract the amount owed from any fruit winnings subsequently obtained by the one player and credit this to the other player.

At the end of play, i.e. when neither player has any remaining credits displayed in display 22 or 22a, the machine may pay out the total winnings indicated by both of the indicators, and the players may divide the winnings as indicated or otherwise, as they desire.

The adder 40 and calculating means 33 are preferably both part of an electronic control means which controls the operation of the machine.

Referring now to Fig. 2, a similar machine is diagrammatically shown and thus, like parts are indicated by the same reference numerals. However, instead of a fixed percentage of the fruit winnings being deducted from, for example, from player two and credited to player one, when a special marking 26 appears in a winning combination of symbols, a percentage of player two's winnings indicated by indicator 25a are subtracted. This is achieved by a signal passing along a line 51 from a sensing means of the machine, which senses marking 26 is present in the winning combination, to a subtractor 52 which senses the amount of player two's winnings via line 53 indicated by indicator 25a, and subtracts a fixed percentage, e.g. 50% of these via line 54. The fruit winnings, (e.g. again 80p) and the subtracted amount, are then added together in an adder 40' and the total credited to player one.

Either of the machines described with reference to Fig. 1 or Fig. 2 may have additional

features, such as a nudge feature which operates at random and is commonly provided on many machines to enable one or more of the reels 11, 12, 13 to be nudged after the reels have been stopped to bring the next symbol into view, and/or a hold feature which operates at random so that one or more of the reels 11, 12, 13 may be held whilst the remaining reel or reels is/are spun during a subsequent play, in both cases to increase the player's chances of obtaining a winning combination.

It will be appreciated that where a hold feature is provided, as player one and player two play alternately, that this would significantly increase a player's chance of recovering some or all of his winnings as credited to the other player.

A special feature may be provided so that if for example two or more special markings 26 occur in a winning combination, all three reels 11, 12, 13 may be held if a winning combination is achieved.

Referring now to Figs. 3 and 4, another machine incorporating the invention is shown.

Again similar parts are indicated by the same reference numerals and it is again assumed that player one, i.e. the left hand player, has achieved a winning combination of symbols on the reels 11, 12, 13.

However, none of the reels 11 to 13 have any special marking such as marking 26 of the machines of Figs. 1 and 2 but rather the machine has a built in random feature so that upon randomly determined winning combinations, the following special feature operates, enabling a winning player to gamble his fruit winnings against the other player.

Upon the machine randomly selecting this special feature, an operating button 60 will be illuminated to indicate to the winning player, in the example player one, i.e. the left hand player, that he has the opportunity of gambling his winnings. If he chooses not to gamble within a set time, say five seconds, then his fruit win is simply credited to him by adding the fruit winnings to the amount already indicated by indicator 25.

If however, he chooses to gamble his winnings, i.e. he presses button 60, and the machine will randomly select whether he wins or loses. Fig. 3 illustrates the case where he wins and Fig. 4 where he loses.

Referring to Fig. 3, a signal is sent via a line 61 from the gamble feature 60 to a "win" indicator 62 which subtracts an amount equivalent to the fruit win from player two's winnings as indicated by his indicator 25a via lines 63 and 64 and the amount subtracted from player two's winnings and the fruit win one added in an adder 40'' and credited to player one's winnings as indicated by his indicator 25, via line 65.

Referring now to Fig. 4, in the event of player one losing the gamble, a signal is sent

via a line 66 to a "lose" indicator 70 which takes the fruit win and credits it to the winnings already indicated in player two's indicator 25a via line 71.

- 5 Various modifications are of course possible to the machine described with reference to Figs. 3 and 4. For example, if desired a special marking may be provided on one or more of the reels 11, 12, 13 which when
10 displayed as part of a winning combination causes the gamble feature to operate.

Further, instead of having to gamble the entire fruit winnings, a facility may be provided on the machine to enable a player to
15 gamble only a proportion of his fruit winnings. Again, nudge and hold features may be provided if required.

CLAIMS

- 20 1. A gaming machine of the kind specified having means to enable all or a proportion of the winnings credited to one player for a previous game, or previous games, to be subtracted from said one player's winnings
25 and credited to the other player.
2. A machine according to Claim 1 wherein the machine pays out winnings to the players after each winning play in addition to displaying each of their winnings.
- 30 3. A machine according to Claim 1 wherein the machine pays out winnings to the players, as displayed, only at the end of a predetermined number of plays.
4. A machine according to any one of
35 Claims 1 to 3 wherein a player may elect to gamble his winnings against the other player when said one player has a winning combination of symbols and a gamble feature operates.
- 40 5. A machine according to Claim 4 wherein the gamble feature is operated at random by the machine.
6. A machine according to Claim 4 wherein the gamble feature is operated upon
45 a predetermined winning combination of symbols being displayed.
7. A machine according to any one of Claims 1 to 3 wherein upon the appearance of a special symbol present on some of the
50 symbols in any winning combination of symbols in a game played by one player, the machine is arranged to automatically deduct at least a proportion of any already credited winnings of the second player and credit them
55 to said one player instead of or in addition to the winnings from the winning game.
8. A machine according to Claim 7 wherein a percentage of the win of the winning play is deducted from the other player's
60 winnings, or a percentage of the other player's already credited winnings.
9. A machine according to Claim 7 or Claim 8 wherein more than one special symbol is provided, and on the appearance of two
65 such symbols in a winning combination of

symbols in a play by the first player the machine subtracts a different proportion of the winnings of the other player and credits them to said one player.

- 70 10. A machine according to any one of Claims 1 to 9 wherein the machine is provided with a nudge and/or hold after win feature.

11. A machine substantially as hereinbefore described with reference to and as shown
75 in Fig. 1 or Figs. 3 and 4 of the accompanying drawings.

12. Any novel feature or novel combination of features disclosed herein and/or as
80 shown in the accompanying drawings.

Printed in the United Kingdom for
Her Majesty's Stationery Office, Dd 8818935, 1986, 4235.
Published at The Patent Office, 25 Southampton Buildings,
London, WC2A 1AY, from which copies may be obtained.

THIS PAGE BLANK (USPTO)